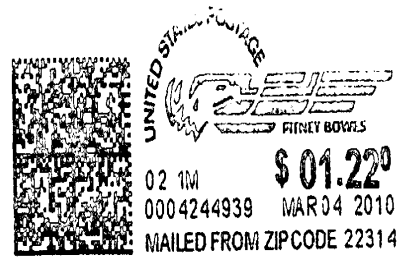




E.O. DOX 1430

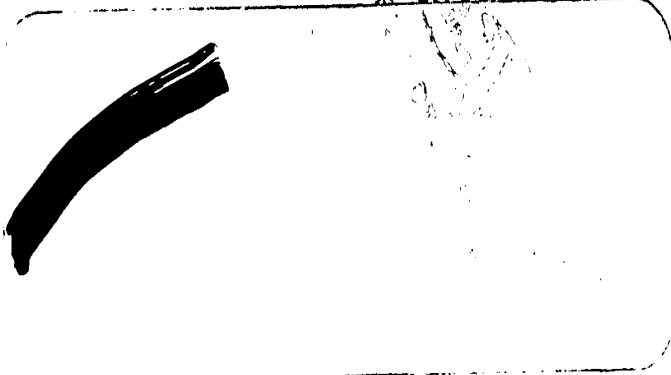
Alexandria, VA 22313-1450

If Undeliverable Return in Ten Days

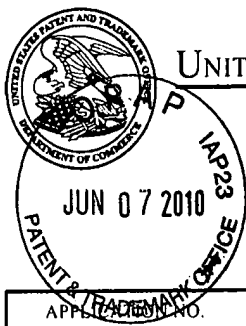


OFFICIAL BUSINESS  
PENALTY FOR PRIVATE USE, \$300

**AN EQUAL OPPORTUNITY EMPLOYER**



AF/IFW



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/598,491

12/06/2006

Johnson Oyama

P19317-US2

6274

27045 7590 03/04/2010  
ERICSSON INC.  
6300 LEGACY DRIVE  
M/S EVR 1-C-11  
PLANO, TX 75024

EXAMINER

DEAN, JR, JOSEPH E

ART UNIT

PAPER NUMBER

2617

MAIL DATE

DELIVERY MODE

03/04/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/598,491	<b>Applicant(s)</b> OYAMA ET AL.	
	<b>Examiner</b> JOSEPH DEAN, JR	<b>Art Unit</b> 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on August, 24, 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-9, 11, 16, 19, 20, 31-36 and 38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11, 16, 19, 20, 31-36 and 38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Response to Amendment***

1. Applicant amended claims 1, 5, 6-9, 16, 20, 31, 33-35 and 38.
2. Applicant previously cancelled claims 10, 12-15, 17, 18, 21-30 and 37.
3. Status of claims:

Claims 1-9, 16, 19, 20, 31-36 and 38 are pending.

***Response to Arguments***

4. Applicant's arguments with respect to claims 1, 5, 6-9, 16, 20, 31, 33-35 and 38 have been considered but are moot in view of the new ground(s) of rejection. The rejection of Johansson et al. (US20020080752) (hereinafter Johansson), therefore above claims will remain rejected.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-9, 11, 11, 19, 20, 31-36 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johansson (US20020080752), and further in view of Acharya et al. (US6829709) (hereinafter Acharya).

Per claim 1, Johansson discloses a method of access control for a movable network managed by a mobile router, wherein said mobile router is interconnected through a bi-directional link with a mobility anchoring agent that anchors the network

mobility for the mobile router( paragraph 0067, Fig 1, i.e. **anchoring agent is home agent 1 and mobility router is foreign agent 2**), said method comprising the steps of: but fails to disclose filtering at the mobility anchoring agent, downlink packets to said mobile router to eliminate unauthorized downlink packets before the packets are transmitted over an air interface; and filtering at said mobile router, uplink packets to said mobility anchoring agent to eliminate unauthorized uplink packets before the packets are transmitted over the air interface

However, Acharya discloses method comprising the steps of filtering at the mobility anchoring agent, downlink packets to said mobile router to eliminate unauthorized downlink packets before the packets are transmitted over an air interface(col.4 lines 11-51, Fig 1 and also see claim 5, i.e. **mobility anchoring agent can be host 103 or 117 in fig 1, IP packets can be exchanged between sub networks or hosts connected directly to the internet are transformed at transformation points just before they enter and as soon as they leave the core IP network, transformations can be done at the host or routers, transformation includes IP-sec or encryption which protect data against unauthorized disclosures**; and filtering at said mobile router, uplink packets to said mobility anchoring agent to eliminate unauthorized uplink packets before the packets are transmitted over the air interface (col.4 lines 11-51, Fig 1 and also see claim 5, i.e. **same rationale as description above**).

Therefore, one skilled in the art would have found it obvious from the combined teachings of **Johansson**, provides mobile router that's interconnected through

bidirectional link, **Acharya** provides filtering via router and mobility agent before entering and leaving internet, as a whole to produce the invention as claimed with a reasonable expectation of protecting against unauthorized data or packets.

Per claim 2, the combination discloses the method of claim 1, wherein Johansson discloses said mobility anchoring agent is a home agent in a home network of said mobile router (paragraph 0013 and 0014).

Per claim 3, the combination discloses the method of claim 1, wherein Johansson discloses said mobility anchoring agent is a local forwarding agent in a visited network (paragraph 0013 and 0014).

Per claim 4, the combination discloses the method of claim 1, wherein Johansson discloses said mobility anchoring agent runs a NEMO-based (Network Mobility) mobility support protocol with said mobile router (paragraph 0010, 0013 and 0014).

Per claim 5, the combination discloses the method of claim 4, wherein Johansson discloses said mobile router is interconnected with said mobility anchoring agent through a NEMO bi-directional tunnel (paragraph 0010 and 0067, Fig 1, i.e. **mobility IP (MIP) or NEMO provides knowledge where mobile nodes are attached to the network**), Acharya discloses the mobility anchoring agent filters downlink packets before said bi-directional tunnel (col.4 lines 11-51, Fig 1 and also see claim 5), and the mobile router filters uplink packets before said bi-directional tunnel (col.4 lines 11-51, Fig 1 and also see claim 5)

Therefore, one skilled in the art would have found it obvious from the combined teachings of **Johansson**, provides mobile router that's interconnected through network mobility bidirectional link, **Acharya** provides filtering via router and mobility agent before entering and leaving internet, as a whole to produce the invention as claimed with a reasonable expectation of protecting against unauthorized data or packets, and as the network moves, able to maintain access to the network.

Per claim 6, the combination discloses the method of claim 1, wherein Acharya said step of filtering downlink packets at the mobility anchoring agent includes checking headers of downlink IP packets that traverse an access control point in said mobility anchoring agent (host 103/Fig 1) (col.7 lines 41-67 and col.8 line 1-22, i.e. **headers are checked and validated if transformation was applied**), and said step of filtering uplink packets at said mobile router includes checking headers of uplink IP packets that traverse an access control point in said mobile router ( ref.101/Fig 1) (col.7 lines 41-67 and col.8 line 1-22, i.e. **headers are checked and validated if transformation was applied**).

Therefore, one skilled in the art would have found it obvious from the combined teachings of **Johansson**, provides mobile router that's interconnected through network mobility bidirectional link, **Acharya** provides filtering via router and mobility agent of IP packet headers, as a whole to produce the invention as claimed with a reasonable expectation of validating or failing authorized and unauthorized packets .

Per claim 7, the combination discloses the method of claim 1, Johansson further comprising the step provisioning a first access control module at said mobility anchoring agent and a second access control module at said mobile router with provisioning information from an access control source (paragraph 0071, 0077, Fig 2, 3a)

Per claim 8, the combination discloses the method of claim 7, wherein Johansson discloses said provisioning step comprises the steps of: transferring provisioning information for the first and second access control modules from said access control source to said mobility anchoring agent (paragraph 0126 and Fig 9a, 9b); and subsequently forwarding provisioning information for the second access control module from said mobility anchoring agent to said mobile router over the bi-directional link (paragraph 0126 and Fig 9a, 9b).

Per claim 9, the combination discloses the method of claim 8, wherein Johansson discloses said provisioning information for the second access control module includes provisioning information related only to the uplink from said mobile router to said mobility anchoring agent (paragraph 0077, Fig 3b, i.e. **second access control module ref. 32e**).

Per claim 11, the combination discloses the method of claim 7, wherein Johansson discloses said access control source is implemented in an AAA client (paragraph 0071), and provisioning information related to a node in said movable network is transferred from an AAA server associated with the home network of said node to said AAA client and the access control source (paragraph 0071).

Per claim 16, refer to same rationale as explained in claim 1.



Per claim 19, refer to same rationale as explained in claim 4.

Per claim 20, refer to same rationale as explained in claim 5.

Per claim 31, refer to same rationale as explained in claim 1.

Per claim 32, refer to same rationale as explained in claim 4.

Per claim 33, refer to same rationale as explained in claim 5.

Per claim 34, refer to same rationale as explained in claim 6.

Per claim 35, refer to same rationale as explained in claim 7.

Per claim 36, refer to same rationale as explained in claim 9.

Per claim 38, Johansson discloses an access control enforcement module for operation with a mobility anchoring agent that anchors network mobility for a mobile router managing a movable network, said mobile router being interconnected through a bi-directional link with said mobility anchoring agent (paragraph 0070-0073), but fails to disclose wherein said access control enforcement module includes means for monitoring and filtering\_downlink packets to said mobile router to eliminate unauthorized downlink packets before the downlink packets are transmitted over the bi-directional link.

However, Acharya discloses wherein said access control enforcement module includes means for monitoring and filtering\_downlink packets to said mobile router to eliminate unauthorized downlink packets before the downlink packets are transmitted over the bi-directional link (col4. lines 52-67 and col.5 lines 1-19, i.e. **Encapsulating Security Payload or IP-sec protect packets sent over distrusted subnetworks, IP packets exchanged between subnetworks connected directly to the internet are**

**encrypted or authenticated just before they enter and soon as they leave the untrusted network).**

Therefore, one skilled in the art would have found it obvious from the combined teachings of **Johansson**, provides mobile router that's interconnected through bidirectional link, **Acharya** provides filtering via router and mobility agent before entering and leaving internet via encryption, as a whole to produce the invention as claimed with a reasonable expectation of protecting against unauthorized data or packets.

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

### **Contacts**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSEPH DEAN, JR whose telephone number is (571)270-7116. The examiner can normally be reached on Monday through Friday 7:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne Bost can be reached 571-272-7023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dwayne D. Bost/  
Supervisory Patent Examiner,  
Art Unit 2617

/JOSEPH DEAN, JR/  
Examiner, Art Unit 2617

<b>Notice of References Cited</b>	Application/Control No. 10/598,491	Applicant(s)/Patent Under Reexamination OYAMA ET AL.	
	Examiner JOSEPH DEAN, JR	Art Unit 2617	Page 1 of 1

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2002/0080752 A1	06-2002	Johansson et al.	370/338
*	B	US-6,829,709	12-2004	Acharya et al.	370/338
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.